

THE CLAIMS

5

What is claimed is:

1. A dispensation system for providing a beverage product comprising:
a packaging assembly configured and designed for storing at least two
10 different components in separate compartments, wherein the components are capable of
forming a beverage after being combined;

15 at least a pump assembly for pumping the components from the packaging
assembly to an addition chamber operatively associated with the compartments of the
packaging assembly for receiving and combining the at least two components therein to
form a mixture which is delivered therefrom as a beverage product or beverage forming
product.

20 2. The dispensation system of claim 1 which further comprises means
for providing a diluent to the mixture of the least two components to provide the beverage
product.

25 3. The dispensation system of claim 2, wherein the means for providing
a diluent comprises a diluent tank filled with one of water, carbonated water, a milk or non-
dairy milk product, a solution containing any of these, or a mixture thereof.

4.

4. The dispensation system of claim 3, wherein the diluent tank is filled
with water or an aqueous solution so that the beverage product is a non-carbonated
beverage, a coffee or tea beverage, or a creamy beverage.

30

5. The dispensation system of claim 1, wherein the pump assembly
comprises dual-head or multi-head volumetric positive displacement pumps.

35 6. The dispensation system of claim 5, wherein the volumetric positive
displacement pumps are peristaltic pumps.

7. The dispensation system of claim 1, wherein the packaging assembly
has dual compartments for retaining the components therein.

5 8. The dispensation system of claim 1, wherein the packaging assembly
is a single chamber of a polymer film that is divided to form the compartments.

9. The dispensation system of claim 8, wherein each compartment
includes a fitment to dispense the components from the compartments.

10 10. A method for dispensing a beverage product containing at least two
different components, which method comprises:

 providing and retaining at least two different components in separate
 compartments of a single packaging assembly, wherein the components are capable of
15 forming a beverage after being combined and the compartments contain relative amounts of
 each component, such that each compartment empties uniformly relative to the other
 compartment(s) at a determined rate, to empty the compartments at substantially the same
 time;

 combining the at least two components by withdrawing them from the
20 packaging assembly and mixing them together, optionally with a diluent, to form a
 consumable beverage product; and

 dispensing the consumable beverage product for consumption by a
 consumer.

25 11. The method of claim 10, wherein a first component has a first
 viscosity and a second component has a second viscosity, and wherein a diluent having a
 viscosity is combined with the components, with the first viscosity, the second viscosity, or
 both being greater than twice the viscosity of the diluent.

30 12. The method of claim 11, wherein the diluent comprises water,
 carbonated water, a milk or non-dairy milk product, a solution containing any of these, or a
 mixture thereof.

 13. The method of claim 11, wherein a first component is a coffee base
35 concentrate having at least about 10% by weight of soluble coffee solids and a second
 component is a coffee aroma.

14. A method for improving quality of a dispensed coffee beverage
5 containing at least two different components, which method comprises:

providing and retaining at least two different components in separate compartments of a single packaging assembly, wherein the components are capable of forming a coffee beverage after being combined;

10 combining the at least two components by withdrawing them from the packaging assembly and mixing them together, optionally with a diluent, to form a consumable beverage product; and

dispensing the consumable beverage product for consumption by a consumer.

15 15. The method of claim 14, wherein the compartments contain relative amounts of each component, such that each compartment empties uniformly relative to the other compartment(s) at a determined rate, to empty the compartments at substantially the same time.

20 16. The method of claim 14, wherein the packaging assembly is a single chamber of a polymer film that is divided to form the compartments.

25 17. The method of claim 15, wherein one component is a coffee base concentrate that is substantially free of coffee aroma, and another component is a coffee aroma.

18. A method for facilitating handling and loading of at least two components in a dispensation system comprising providing and retaining the at least two components in at least two compartments that are separate but secured together, each 30 compartment comprising a fitment adapted to connect to a complementary gland of the dispensation system.

19. The method of claim 18, wherein the at least two compartments are secured together by heatsealing or using an adhesive.

35

20. The method of claim 18, wherein the at least two compartments are secured together within a single outer container.

5 21. A beverage packaging assembly adapted for delivering at least two different components, each having a particular viscosity, optionally together with an additional diluent, to form a beverage, wherein the beverage assembly includes:

10 an outer chamber having at least two separate compartments for receiving and storing therein at least two different components, each compartment having a predetermined volume occupied by the component(s) therein; and

 a fitment attached to each of the compartments and having a predetermined orifice size,

15 wherein the occupied volumes of the compartments and the orifice sizes of the fitments are varied depending on the particular viscosities of the components therein, to provide the appropriate flow rates and a desired ratio of the components upon delivery and formation of the beverage, such that the compartments become empty at substantially the same time.

22. A beverage packing assembly adapted for delivering at least two different components entering in the composition of a beverage, optionally with addition of a diluent, wherein the packing assembly comprises at least two compartments for separately receiving and storing the components therein, and a first connection means attached to each compartment adapted to deliver the component upon engagement of a second connection means of a dispensation system which is complementary to the first connection means.

25

23. A beverage packing assembly according to claim 22 wherein the first and second connection means are of the push-and-lock type.

24. A beverage packing assembly according to claim 22 wherein the two different components are a coffee base concentrate and a coffee aroma.

35